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I.—New Species of Heterocera from Costa Rica.—XIX. By W. SCHAUS, F.Z.S.

Noctuidæ.

Erastria roseoviridis, sp. n.

3. Head and thorax mottled reddish brown and lilacine. Abdomen irrorated with fuscons grey, and at base dorsally with brown. Fore wings pale green; base reddish brown and lilacine, its outer edge vertical; outer margin broadly lilacine, crossed by two reddish-brown shades, preceded by an olive-green shade; termen narrowly pale green; a terminal macular line, pale brown; at end of cell a large spot, whitish behind, finely outlined with purple; costa postmedially streaked with purplish brown. Hind wings greyish at base, ontwardly tinged with pale reddish brown; a black discal spot on hind wings.

Expanse 23 mm.

Hab. Sixola, Banana River.

Ostha concinna, sp. n.

3. Body greyish brown. Fore wings light brown, thinly irrorated with dark brown and with fuscous-brown markings; Ann. & Mag. N. Hist. Ser. 8, Vol. xi, 1 an antemedial wavy line, slightly outcurved, followed by a spot on costa, and small spot in cell; a large spot at end of cell containing some white irrorations; postmedial fine, sinuous, partly irrorated with white and suffusing beyond cell with the fuscous-brown terminal space, this latter crossed by a subterminal light brown shade, also sinuous; a narrow light brown shade terminally opposite cell, and pale points at veins; cilia light brown spotted with fuscous. Hind wings light brown, with dark irrorations; a small white discal spot ; a postmedial dark brown lunular line not reaching costa and outwardly finely edged with white; terminal space tinged with fuscous grey, crossed by a pale subterminal shade. Hind wings below whitish grey on basal half; a dark spot on discocellular, and fine postmedial line; the terminal space broadly shaded with fuscous; traces of a paler subterminal line.

Expanse 20 mm.

Hab. Juan Vinas, Esperanza.

Ostha rama, sp. n.

9. Body and wings brown. Palpi: second joint fringed below; third joint smooth, conical, short. Wings: terminal buff-white points at veins. Fore wings: a round white spot at base; a large round yellowish-white spot in cell suffusing behind with an oblique white fascia inbent from just beyond cell to submedian vein medially; this fascia partly shaded with yellowish, and with a dark brown line on discocellular; a yellow-white streak on costa before apex, and faint traces of a fine yellowish subterminal line. Hind wings: some pale brownish markings on inner margin. Wings below greyish brown; a darker medial line on hind wings, followed by a whitish-grey shade.

Expanse 16 mm.

Hab. Banana River.

Ostha nomion, sp. n.

3. Head fuscous brown. Thorax and abdomen buffbrown. Wings brown, tinged with buff at base and on costa of fore wings, thinly irrorated with darker brown; a terminal fuscous-brown line interrupted by light brown points at veins; a faint dark subterminal line. Fore wings: antemedial line fine, dark, wavily dentate, almost vertical; a black point in middle of cell; reniform oblique, white, darkly edged; postmedial line fine, dark, wavy, outcurved beyond cell. Hind wings: a white dark-edged line on

Heterocera from Costa Rica.

discocellular; postmedial fine, dark, irregular, deeply inbent below vein 2. Wings below pale, thickly irrorated with light brown; dark discocellular lines and outcurved postmedial line.

Expanse 18 mm. Hab. Juan Vinas.

Ostha hypsea, sp. n.

3. Palpi, head, and collar fuscous brown. Thorax and abdomen buff. Fore wings: base and costal margin buff; brown irrorations medially, increasing and forming a darker shade to postmedial, except on costa; postmedial outeurved beyond cell, defined by a buff shade following it; a black point in cell; a fuseous shade as reniform containing some white scales ; terminal space broadly dark brown, with an indistinct still darker subterminal shade, only distinct on pale costa; terminal pale points, interrupting a fuscous line. Hind wings light brown irrorated with dark brown, and shaded with fuscous brown, medially, and on costal half to termen; a white streak on discocellular darkly edged; a dark postmedial line, inbent below vein 2, outwardly shaded with light brown. Fore wings below fuscous brown; a postmedial buff line and spot at apex. Hind wings below buff, thickly irrorated with brown except on outer side of dark postmedial line; a dark discal spot.

Expanse 18 mm. Hab. Sixola.

AMPELASIA, gen. nov.

Female.-Palpi upturned, very long; second joint densely sealed, reaching well above head; third joint smooth, almost as long as second. Antennæ with short bristles. Legs smooth, spurs on hind tibia long. Abdomen with short dorsal tuft at base. Fore wings : apex acute, outer margin obliquely rounded; vein 2 from near middle of cell; 3 close to lower angle; 4 from lower angle; 5 slightly above lower angle; 6 from below upper angle; 7-10 stalked from upper angle, 7 from before 10; 11 free. Hind wings : apex and anal angle rounded, outer margin almost straight; cell very short; vein 2 from close to lower angle; 3 and 4 stalked; 5 well above angle; 6 and 7 stalked.

Type of genus, Ampelasia azelinoides, Schs.

Ampelasia azelinoides, sp. n.

2. Body dark grey-brown. Fore wings dark grey-brown,

shading to fuscous brown postmedially, limited by a fine yellow-buff line nearly vertical from costa to vein 4, inbent, vertical to submedian, and incurved on inner margin; outer margin broadly dull grey tinged with buff near line; a marginal angled fuscous-brown streak between veins 7 and 8 and a small spot below 7; a fine dark brown antemedial line, outcurved to median, vertical to submedian, inbent below it; orbicular and reniform spots both minute, whitish buff, partly edged with fuscous brown. Hind wings dull brownish grey; a fine postmedial fuscous line to vein 3, then white, surmounted by a triangular fuscous-brown patch, and followed by a light brown shade also from vein 3 to inner margin, beyond which are two fine inversely lunular brownish lines, with mottled brown shading between them. Wings below dull greyish brown ; a postmedial series of pale yellow spots partly suffusing; a small white spot near apex of fore wing.

Expanse 40 mm.

Hab. Juan Vinas.

TRANOSES, gen. nov.

Male.—Palpi thickly scaled, obliquely ascending, fringed on second joint below, reaching beyond tip of third joint, which is very short. Antennæ pubescent. Legs smooth. Fore wings narrow; apex rounded, outer margin oblique; vein 3 well before lower angle; 4 and 5 apart from lower angle; 6 from upper angle; 7-10 stalked from before end of cell; 11 free. Hind wings: veins 3 and 4 on long stalk; 5 above lower angle; 6 and 7 stalked.

Type of genus, Tranoses hirtipuncta, Schs.

Tranoses hirtipuncta, sp. n.

3. Body and fore wings buff-white, with some scattered brown irrorations. Fore wings: cell anteriorly and a shade to costa before apex clearer white, also the space between cell and submedian; the irrorations forming a faint streak in cell above median, upbent beyond cell to termen at apex, suffusing with the subterminal irrorations; orbicular and reniform brown points; terminal brown points. Hund wings white. Fore wings below whitish, base of costa tufted, terminating in a black spot; the costal margin and veins tinged with pale brown.

Expanse 20 mm. Hab. Juan Vinas.

Dagassa? parthenope, sp. n.

9. Palpi, head, thorax, and fore wings pale lilacine buff thinly irrorated with black. Abdomen and hind wings pale buff, the latter thinly suffused with fuscous brown except on costa. Fore wings: lines fine, indistinct, pale greenish brown; antemedial line sinuous, outcurved; a medial line, slightly outcurved; an indistinct paler shade on discocellular; postmedial line ontangled at vein 6, suffusing with a thicker black line which extends from apex to vein 2, below vein 2 the postmedial is again pale greenish brown; a fine wavy subterminal shade; marginal black points on interspaces. Wings below pale buff; the disc of fore wings shaded with fuscous; a fine postmedial line.

Expanse 25 mm.

Hab. Juan Vinas.

Capnodes herilis, sp. n.

2. Head and thorax brown, the abdomen darker. Wings brown shot with purple, the lines rich dark brown; a subterminal wavy sinuous line; a dark terminal line, narrowing at veins, where it is interrupted by a light brown point. Fore wings: antemedial line vertical, inwardly edged with lighter brown; reniform narrow, constricted, finely outlined in dark brown; postmedial line outcurved around cell, outwardly edged with lighter brown. Hind wings: a faint darker line on discocellular; postmedial line as on fore wings but straight. Wings below dark greyish brown; fine darker streaks on discocellular, and a fine dark postmedial line, straight on both wings, terminal line as above but less distinct.

Expanse 31 mm.

Hab. Cachi.

This is the C. linula of the 'Biologia,' but not of Guénée.

PELODIA, gen. nov.

Male.—Antennæ ciliated. Palpi obliquely ascending; second joint flat, broad, thickly scaled, reaching well above head; third joint short, naked, acuminate. Legs smoothly scaled; base of fore tarsi with short process; hind tibia with two pairs of spurs. Fore wings narrow; costal margin straight; apex acute; outer margin bulged; inner margin straight; vein 3 near lower angle; 4 from angle, 5 close above; 7, stalk of 8 and 9, and 10 from end of areole. Hind wings; costal margin straight; outer margin oblique, angled at vein 2; veins 3 and 4 from lower angle; 5 from lower third of discocellular; 6 and 7 from upper angle.

Type of genus, Pelodia rava, Schs.

Pelodia rava, sp. n.

3. Palpi and head buff-brown; collar shading to grey; thorax light grey; abdomen brownish buff. Fore wings grey shaded with whitish antemedially below cell and at end of cell, obliquely extending to and expanding at tornus; a clearer white shade on apical third of costa; the base shaded with pale brown, limited by the faintly dark antemedial line, which is inbent to median, outset and inbent to submedian, outbent on inner margin; wing partly crossed by fine brownish striæ; orbicular a black point; a dark grey oblique line medially from costa to reniform, which consists of an incurved dark brown line, outwardly shaded with reddish brown ; postmedial line as a fine greyish line on costa, from vein 7 whitish irrorated with reddish brown, outangled close above vein 6, inbent to vein 3, below which it is obsolescent. The termen from vein 3 to apex shaded with brown; terminal black points on interspaces, the largest on submedian fold. Hind wings luteous white, the outer margin broadly shaded with brownish grey; terminal black points. Fore wings below whitish shaded with brown; a straight vertical dark postmedial line. Hind wings below whitish with some scattered dark irrorations and a black discal point; the terminal points partly connected by a fine black line.

Expanse 28 mm. Hab. Guapiles.

Subfamily DELTOIDINE.

Mastigophorus pasithea, sp. n.

2. Body and wings whitish buff, thinly irrorated with dark brown. Fore wings: a faint brown postmedial shade, inwardly oblique, followed by a fine parallel line; subterminal line whitish, inwardly shaded with dark brown; termen shaded with brown; a terminal dark line. Hind wings: some brown irrorations on inner margin and between veins 2 and 4; the subterminal line and terminal space as on fore wings. Wings below more thickly irrorated with brown; a dark subterminal line on fore wings; fine medial, postmedial, and subterminal lines on hind wings. The male of this species has the palpi very long, almost reaching to end of abdomen.

Expanse 15 mm.

Hab. Esperanza. In Coll. Dognin from French Guiana.

Mastigophorus curvilinea, sp. n.

2. Palpi, head, and thorax dull brown. Abdomen dark brownish grey, with paler segmental lines and tufts at base. Fore wings brown, the lines fine, dark brown; a subbasal line, outbent on inner margin; antemedial line evenly outcurved; orbicular a white point circled with dark brown; a broad dark brown medial shade, barely indicated on costa; two white points on discocellular edged with dark brown; postmedial line outcurved on costa, with a small dark spot above it, inbent, faintly sinuous, outbent below submedian fold; outer margin broadly somewhat darker; a subterminal pale dentate line from costa to vein 7, followed by a dark brown shade above vein 7 to apex, and a small similar spot below 7; short subterminal pale streaks on veins otherwise; a fine dark terminal line, outwardly pale-edged. Hind wings whitish suffused with brownish grey ; postmedial and subterminal fine lines; termen narrowly darker shaded; the terminal line fuscous. Fore wings below greyish, the costal margin shaded with light brown; a fine postmedial line; a black subterminal shade on costa. Hind wings below buff-grey irrorated with brown; a black spot on discocellular preceded by a black streak in cell; postmedial line finely wavy; an interrupted subterminal line.

Expanse 30 mm.

Hab. Poas.

This species can be recognized by the evenly curved antemedial line, which is usually outbent on inner margin.

Mastigophorus evaduealis, sp. n.

9. Palpi light brown, head, collar, and patagia darker brown, thorax and abdomen above fuscous, all irrorated with minute metallic steel-coloured scales; body below pale buff. Fore wings rich brown, the inner margin broadly and terminal interspaces fuscous, thickly irrorated with metallic steelcolour; costal margin darker brown; some metallic irrorations on basal third, along median vein, and on postmedial space; a pale brown shade in and beyond cell interrupted by the broad rich brown reniform; a postmedial thick brown line on inner margin and a similar subterminal line from costa to inner margin; veins fuscous on outer margin to the terminal brown line. Hind wings: costal and inner margins broadly fuscous grey, the intermediate space and termen from vein 2 to apex fuscous, irrorated with metallic scales, this space crossed by a short postmedial brown line, and a subterminal and terminal line from vein 2 to costa; cilia at anal angle buff-white.

Expanse 21 mm. Hab. Limon.

MASTIXIS, gen. nov.

Male. — Antennæ pubescent, ciliate. Palpi upcurved, reaching thorax behind, the third joint with long tufts on inner side from base. Legs smoothly scaled. Fore wings: costal margin long, convex toward apex; outer margin oblique; vein 2 from near middle of cell; 3 before lower angle; 4 and 5 from lower angle; 6 from near upper angle; a minute areole; vein 7 from end, 8, 9, 10 stalked from end. Hind wings: cell short; veins 3 and 4 stalked; 5 from near lower angle; 6 from close to upper angle.

Type of genus, Mastixis chloe, Schs.

Mastixis chloe, sp. n.

3. Body above brownish grey, underneath white irrorated with brownish grey. Fore wings brownish grey; antemedial outbent on costa, fuscous, otherwise dark brown, finer, wavy, vertical; orbicular small, yellowish, finely circled with dark brown; reniform crescent-shaped, yellowish and reddish brown, edged with dark brown, above it an outbent fuscous line on costa, and traces of a fine brownish line from below it to inner margin; outer line straight, broad, yellowish white, inwardly edged by a very fine dark brown line and outwardly by a brown shade; subterminal fuscous spots towards apex; a terminal black line interrupted by veins. Hind wings whitish, the outer margin broadly brownish grey, inwardly limited by an outer line as on fore wing, but crossed by a whitish shade between veins 5 and 6; the outer line angled near tornus and followed by a pale subterminal line; some brownish-grey shading from cell to inner margin, and a postmedial fuscous shade towards inner margin. Hind wings below whitish irrorated with brown, and with faint medial, postmedial, and subterminal lines; all interrupted by a clear white streak above vein 5 from cell to termen ; black discal spots on wings.

Expanse 23 mm. Hab. Juan Vinas. Near M. lineata, Schs.

Mastixis poasalis, sp. n.

3. Palpi outwardly, head, collar, and thorax dark brown. Abdomen fuscous. Fore wings dark brown, somewhat paler between postmedial and subterminal lines from yein 5 to inner margin; antemedial line fine, pale brown, outcurved across median, outbent from fold, outwardly dark-edged; orbicular small, fuscous brown; a white line on discocellular; postmedial fine, light brown, inwardly dark-edged, almost vertical to vein 4, then slightly incurved ; subterminal indistinct, sinuons, with short pale streaks on veins; a terminal black line. Hind wings brownish grey; faint postmedial and subterminal lines, the latter pale-edged; a black terminal line. Fore wings below fuscous ; a faint postmedial line and dark subterminal shade on costa. Hind wings below whitish irrorated with grey-brown; a black discal spot; a fine postmedial line and subterminal shade; terminal black line partly interrupted.

Female brighter brown, the lines fuscous, a darker medial shade; orbicular with a white point; reniform consisting of four or five white spots.

Expanse, & 23-27, & 25 mm. Hab. Poas, Turrialba.

Mastixis turrialbensis, sp. n.

2. Palpi buff thickly irrorated with dark dull brown. Head dark dull brown. Collar and thorax buff-brown, irrorated with dark brown and black. Abdomen dull brown. Fore wings dull brown irrorated with dark brown, the lines black-brown, fine; a coarse line at base; antemedial line outbent to orbicular, incurved below cell, outbent on inner margin, preceded by a pale shade irrorated with ochreous ; orbicular dark-edged, containing ochreous scales; reniform black-brown, crossed by a whitish and ochreous line; postmedial slightly inbent, lunular below vein 3; subterminal pale, indistinct, inset opposite cell, outwardly shaded with black, chiefly between veins 7 and 6, 4 and 3, and 2 and submedian; terminal semilunar black spots. Hind wings dull brownish grey, the costa whitish; a faint discal spot and postmedial line; a terminal dark line. Fore wings below greyish, shaded with buff on costa; a fine postmedial line on costal margin and large subterminal fuscous shade. Hind wings below greyish white, darkly irrorated; a dark discal spot ; a dentate postmedial line ; a subterminal shade, crossed by a thick fuscous line on fold.

Expanse 32 mm. Hab. Turrialba.

Mr. W. Schaus on

Palthis cacalis, sp. n.

J. Body greyish brown ; abdomen with darker brown segmental lines and pale dorsal points. Fore wings lilacine brown; antemedial line fine, outcurved from subcostal, followed on costa by a pale oblique streak, and dark brown shade suffusing in cell with orbicular, which is small, fuscous, containing some light brown scales; a pale streak along median to postmedial line; reniform crescent-shaped, light brown edged with black ; a broad fuscous shade below it to inner margin; postmedial fine, fuscous, incurved on costa and outbent to vein 4, then sharply incurved, and outangled on submedian, followed by a faint pale shade; a subterminal fuscous line from costa to termen at vein 4, inwardly shaded with light brown and outwardly with dark brown, which does not reach apex ; a terminal dark line. Hind wings somewhat truncated at anal angle, fuscous grey; a terminal dark line and a tuscous shade at vein 2, cut by a short, subterminal, light brown line. Wings below brownish grey; fore wings with pale postmedial and subterminal lines on costal space; hind wings with fuscous discal spot, a postmedial line angled at vein 2, and a subterminal shade.

Expanse 18 mm.

Hab. Juan Vinas, Carillo, Esperanza.

Near P. asopialis, Gn., but easily separated by the subterminal line.

Palthis eubæalis, sp. n.

3. Body brownish grey, the palpi greyer; small dorsal whitish spots on abdomen. Fore wings brownish grey faintly tinged with lilacine; antemedial line darker, outcurved, indistinct, followed by a faintly paler streak on costa and a fuscous line; orbicular a black point; reniform a light brown crescent inwardly edged with black, outwardly followed by a small black spot; a pale buff streak along median vein and a dark shade inbent from below reniform to inner margin; postmedial outbent and straight on costa, very fine, dark grey, followed by a pale buff shade, incurved from vein 4 and dentate on veins ; subterminal very fine, scarcely darker, but inwardly shaded with whitish grey from costa to near termen at vein 3; a terminal fuscous line; cilia fuscous, with a pale line at base. Hind wings angled at vein 2, fuscous brown, darkest along termen; a terminal dark line and fuscous shade at vein 2. Fore wings below fuscous grey,. whitish on inner margin; traces of the pale lines on costa.

Heterocera from Costa Rica.

Hind wings below whitish irrorated with fuscous brown; a fuscous discal streak, the termen dark-shaded.

Expanse 21 mm.

Hab. Peralta.

Near P. accalis, Schs.; easily distinguished by the straight postmedial line on costa.

Palthis submarginata, sp. n.

3. Palpi outwardly, head, collar, and thorax dark lichengrey. Abdomen grey thickly irrorated with purple. Fore wings yellowish brown shaded with purple; a fuscous spot at base; a curved antemedial shade, reddish brown below cell, not reaching submedian; a fuscous geminate medial line, filled in with reddish brown, darkest below cell, inbent and expanding towards base below submedian; an oblique dark line on discocellular shaded with yellow-brown; postmedial diffuse, fuscous, angled at vein 6, terminating at tornus; a wavy marginal black line from apex to vein 4, preceded by a yellowish shade between 4 and 6. Hind wings whitish; a brown shade from near base below cell expanding to subterminal; inner margin and tornus shaded with fuscous; termen from vein 2 to apex dark reddish brown, preceded by a geminate paler brown shade separated by tuseous-grey scaling, and inwardly shaded with black. Fore wings below fuscous; costa on terminal third orange; outer margin and apex yellow, crossed by a subterminal fuscous shade; inner margin white. Hind wings below white; apex and outer margin to vein 2 orange-yellow, preceded by a fuseous shade.

Female: Head and thorax lilacine brown, crossed by two black lines dorsally. Abdomen brownish yellow, with fine black segmental lines. Fore wings yellow-brown tinged with lilacine, the lines fine, fuscous on anterior half, dark purple-red on posterior half; a subbasal line; an antemedial and a medial line, inbent, parallel; outer line outangled on vein 6, inangled at vein 3 below the reddish-brown discocellular line, then outcurved; a faint subterminal line; a terminal dark brown line. Hind wings whitish yellow; a yellow-brown shade below cell expanding to termen and crossed between veins 2 and 5 by a dark outer, subterminal, and terminal line, the latter extending to apex. Wings below yellowish, darkest terminally, with faint outer and subterminal lines; some fuscous shading through cell on fore wings.

Expanse, & 23 mm., \$ 25 mm. Hab. Tuis, Sixola. The & type is from Surinam. The palpi of female are unusually long.

Palthis lineata, sp. n.

3. Body and wings greyish brown. Fore wings: antemedial line angled on costa, medial straighter, both dark brown and suffusing on inner margin; the antemedial suffusing in cell with orbicular ; reniform dark velvety brown, linear, cut by a whitish shade which extends to subterminal; postmedial very fine and indistinct, pale-edged and slightly outcurved ; subterminal wavy, whitish ; a dark terminal line ; the inner margin is lobed just before middle. Hind wings: costal margin whitish to outer line; a faint discal spot; postmedial line not reaching costa; outer line outwardly edged by a pale line. Wings below whitish thickly irrorated with grey-brown, darkest before the subterminal white line; a fuscous streak through cell of fore wing; a discal point and postmedial line on hind wings.

Female very similar to male: fore wings not lobed, the lines finer, more distinct ; the antemedial and medial further apart, incurved, and not suffusing; the postmedial well marked : the white subterminal preceded by a fuscous shade. Hind wings: the postmedial line reaches costal margin.

Expanse, & 20, 9 25 mm. Hab. Poas, Cartago, Laguna.

Palthis hieronymus, sp. n.

2. Body and fore wings buff-white, thinly irrorated with brown; abdomen with a black dorsal patch just beyond middle. Fore wings : costa and termen shaded with lilacine brown ; antemedial very fine and indistinct, wavy, outangled in cell, marked by two fuscous spots on costa; a black point at either end of discocellular, narrowly surrounded by yellowbrown scaling, preceded by a fine black line which expands below cell to inner margin at middle, being heavily shaded with fuscous outwardly; postmedial very fine, somewhat punctiform, outangled on costa, inbent, sinnous, limiting medial shade below vcin 2; subterminal sinuous, defined by a broad pale brown shading inwardly and a fine fuscous line outwardly; a terminal black line; a black spot at apex. Hind wings whitish, with a few scattered dark scales; the termen dull lilacine brown; traces of postmedial and subterminal lines. Fore wings below shaded with fuscous grey. Hind wings below buff-white, more thickly irrorated with fuscous brown; a black discal spot and smaller spots on postmedial and subterminal below vein 6.

Expanse 19 mm.

Hab. San Geronimo.

GIRTESMA, gen. nov.

Male.—Antennæ pubescent, ciliate. Palpi flat, outwardly clothed with spatulate scales, the second joint upcurved, the third bent back, barely reaching thorax. Legs smoothly scaled. Fore wings large, apex acute, the termen bluntly produced at vein 4; vein 3 from before lower angle; 4 and 5 from lower angle; 6 from below upper angle; no areole; 7 shortly stalked with 8 and 9; 10 and 11 from cell. Hind wings broad, the outer margin angled at vein 2, the anal angle obtuse; veins 3 and 4 on short stalk; 5 from near lower angle; 6 and 7 from upper angle.

Type of genus, Girtesma messala, Schs.

General appearance of *Margites*, Dr., which has vein 10 stalked with 8 and 9.

Girtesma messala, sp. n.

J. Palpi brown, the scales partly opalescent. Head and collar brownish buff, with a few dark irrorations. Thorax, base of abdomen, and forc wings pale buff irrorated with dull brown; abdomen otherwise brown above, with pale segmental lines. Fore wings: the scales partly curved at tips with a silvery reflection; costa shaded with brown; antemedial line brown, wavy, nearly vertical; traces of a brown medial shade; postmedial line fine, slightly inbent below vein 5, followed by brown shading to the more heavily marked reddish-brown subterminal line, this shading crossed by an indistinct darker line; termen rather paler, irrorated with brown; a marginal interrupted black line. Hind wings shaded with brownish grey; postmedial line and line following it indistinct, the subterminal indistinct except from veins 4-2, where it is reddish brown, angled at vein 2 and fuscous grey to inner margin, followed between 4 and 2 by a dark greyish line; marginal line as on fore wings; cilia brown. Wings below darker, dull fuscous brown, with an indistinct dark postmedial line.

Expanse 37 mm. Hab. Juan Vinas.

THURSANIA, gen. nov.

Male.—Antennæ pubescent, ciliate; a raised tuft on upper side of shaft just beyond middle. Palpi upcurved, the third joint shorter than second, moderately scaled. Fore tarsi with tuft at base. Fore wings: vein 2 from just beyond middle of cell; 3 from before lower angle; 4 and 5 from lower angle; 6 from below upper angle; 7 from upper angle; 8, 9, 10 stalked from close to end of cell. Hind wings: veins 3 and 4 and 6 and 7 on short stalk; 5 from near lower angle.

Type of genus, Thursania decocta, sp. n.

Thursania decocta, sp. n.

♂. Body and wings dull grey; abdomen darker, with pale segmental lines. Wings faintly irrorated with whitish buff, markings fuscous; a fine medial shade; postmedial line fine, deeply and narrowly lunular; an interrupted terminal line, thickened between veins; a pale line at base of cilia and pale tipped. Fore wings: a fine antemedial line outbent on costa, vertical across cell, slightly outcurved below it; orbicular a small point; reniform a fine line; subterminal fine, whitish buff, preceded by a fuscous spot between veins 7 and 6, and inwardly edged with fuscous from vein 6 to inner margin. Hind wings: a fuscous discal spot; subterminal line edged on either side with fuscous, more heavily marked inwardly. Underneath paler, the markings similar, but no antemedial line on fore wing.

Expanse 28 mm. Hab. Sixola. Near R. cacalis, Schs.

Thursania servilis, sp. n.

2. Head greyish brown. Collar and patagia roseate brown. Thorax and abdomen darker, abdomen below whitish irrorated with grey. Fore wings pale roseate brown; costa shaded with fuscous; a small velvety brown-black spot near base of cell; antemedial line fine, fuscous, outbent, outangled on inner margin, closely followed in cell by a round velvety spot, and a similar larger spot below cell, both finely circled with whitish; a larger velvety spot at end of cell, its edges outcurved, and broadest across its middle; postmedial line fine, dentate, fuscous, rather indistinct, followed by a broad greyish-white shade; terminal space somewhat ochreous,

Heterocera from Costa Rica.

crossed by an irregular, geminate, fuscous shade, more heavily marked at vein 6, below 4, and on inner margin; apex fuscous; a fuscous terminal line. Hind wings fuscous; the postmedial line more heavily marked, geminate between veins 5 and 2 and on inner margin; an indistinct darker subterminal shade. Hind wings below paler; a black discal spot; the postmedial line single.

Expanse 31 mm. Hab. Tuis.

Thursania pholoe, sp. n.

δ. Palpi brown irrorated with buff. Head, collar, and thorax brownish grey. Abdomen fuscous grey. Fore wings brownish grey : a velvety brown-black subbasal streak to median; a similar antemedial fascia across costa and cell, expanding into a large spot between median and submedian; two similar superposed spots at end of cell, partly edged with whitish buff, closely followed by the dentate postmedial line; a subterminal narrow fuscous shade, outangled just above vein 6 and on vein 4; terminal fuscous spots on interspaces. Hind wings fuscous; a faint discal spot, straight postmedial shade, and curved subterminal line. Wings below fuscous grey; dark discal spots and postmedial line. Hind wings rather paler; a subterminal shade, more heavily marked at anal angle.

Expanse 27 mm. Hab. Turrialba.

Thursania dissona, sp. n.

2. Palpi upcurved, second joint smoothly scaled, with tuft above near middle, third joint tufted at middle above, leaving the tip naked, acuminate, lilacine brown irrorated with dull brown, the tufts mottled with black. Head, collar. thorax, and fore wings light brown faintly tinged with lilacine. Abdomen paler at base, irrorated with purplish brown terminally. Fore wings: lines indistinct, consisting of dark irrorations; antemedial ontangled in cell, outbent on inner margin ; traces of a medial line crossing the reniform, which is indistinct, orange-brown; postmedial vertical to vein 2, then slightly incurved; a subterminal, sinuous, dark brown shade, divided by a faint light brown line; the apex shaded with fuscous; an interrupted terminal dark brown line. Hind wings dark grey, the space from veins 2 to 4 buff irrorated with brown; a postmedial fine dark line, vertical to just below vein 2, angled and inbent to inner margin ; the

termen broadly shaded with dark dull brown; a terminal dark brown line. Wings below paler, the hind wings irrorated with brown; a large black discal spot; the postmedial line finely irregular, slightly curved; the discal spot on fore wings a black point.

Expanse 29 mm. Hab. Guapiles.

Thursania chærilus, sp. n.

2. Head and thorax dark brown. Abdomen fuscous brown. Fore wings a trifle paler than thorax, the lines darker; antemedial line slightly outbent to median, then vertical; orbicular a black point; medial shade vertical, crossing discocellular, on which there is a fine blackish line; postmedial line wavy, vertical; a pale subterminal wavy line inwardly broadly shaded with dark brown; a terminal, faintly lunular, brown-black line on both wings. Hind wings dark greyish brown; a dark streak on discocellular, fine postmedial line, and a faint pale subterminal line inwardly shaded with dark brown, chiefly between veins 2 and 5. Wings below paler; black discal spots; a finely wavy dark brown postmedial line; a narrow subterminal dark brown shade.

Expanse 26 mm. Hab. La Florida.

Thursania faustitas, sp. n.

2. Palpi buff, finely darkly irrorated, very long, straight, slender, smoothly scaled, porrect or slightly ascending. Body and fore wings buff, the abdomen with paler segmental lines. Fore wings : antemedial line fine, black, wavy, outbent to submedian, outcurved on inner margin; orbicular small, annular ; reniform finely ontlined in fuscons, containing some orange-brown scaling; postmedial line finely wavy, vertical to vein 2, slightly incurved below it; subterminal line pale, defined by fuscous shading, which expands to apex, incurved opposite cell and below vein 2; on both wings a terminal black line, slightly lunular, interrupted by veins. Hind wings suffused with brownish grey; postmedial line fine, distinct, nearly vertical to vein 2, then inbent to inner margin, followed by a pale shade. Wings below thinly irrorated with brown ; black discal spots, larger on hind wings; a fine postmedial line; a subterminal fuscous shade, crossed by a pale line.

Expanse 30 mm. Hab. Guapiles.

Epizeuxis zentium, sp. n.

3. Head, collar, thorax, and wings dull brown. Abdomen fuscous; anal hairs whitish buff. Fore wings: a black point at base of cell; antemedial fine, dark brown, slightly inset in cell and interrupted below it; a minute orbicular point; a dark brown medial shade, suffusing with reniform, which is large, darkly outlined; postmedial fine, inbent opposite cell, incurved between vein 2 and submedian, partly interrupted; subterminal indistinct, paler, inwardly shaded with dark brown, especially from vein 4 to costa; terminal brown-black points. Hind wings: a velvety discal point followed by a faint medial shade; postmedial dark brown, wavily dentate; a very faint subterminal paler shade; terminal black points. Wings below paler; a wellmarked postmedial line; terminal dark points; a black discal point on hind wings.

Expanse 29 mm.

Hab. Zent.

Very near E. (Bleptina) malia, Dr., which has medial shade and postmodial line further apart and a white point in reniform.

Heterogramma contempta, sp. n.

2. Palpi brown, upcurved, fringed above with grey-black hairs. Head, collar, and thorax dark grey-brown ; patagia light brown. Abdomen light brown, darker shaded terminally. Fore wings light brown, the lines fuscous brown ; antemedial line fine, angled on veins, outcurved from median to submedian ; orbicular rather large, yellow-brown, finely dark-edged; medial shade inbent from costa, vertical below cell, closely followed by reniform, which is large, yellowbrown, containing two black points; postmedial fine, outcurved below costa, sinnons, inbent from vein 4, and slightly outangled on 3, 2, and submedian; an irregular, subterminal, yellow-brown line, partly narrowly edged with dark brown ; terminal semilunar brownish-black spots on interspaces of both wings. Hind wings dark greyish brown; darker medial and postmedial lines; a fine subterminal pale line, partly dentate lunular. Fore wings below dull grey-brown; a darker postmedial line and dark-edged pale subterminal line on costal half of wing. Hind wings below white irrorated with dull brown chiefly on costal margin; a straight medial and curved postmedial line; the whitish subterminal defined by dark shading on either side.

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Expanse 22 mm.

Hab. Esperanza.

Fore wing without areole ; veins 8-10 stalked from end of cell.

APUSTIS, gen. nov.

Male .- Antennæ finely pubescent, ciliate. Palpi upcurved ; third joint nearly as long as second, smooth, acuminate, with tufts of hairs at middle. Fore wings broad, the apex acute, the outer margin incurved below apex, then obliquely rounded; veins 3, 4, 5 apart from lower angle; 6 from near upper angle; 7, 8, 9 stalked from upper angle: 10 and 11 from cell. Hind wings : veins 3 and 4 from lower angle, 5 from close to lower angle, 6 and 7 from upper angle. Type of genus, Apustis sabulosa, Schs.

Apustis sabulosa, sp. n.

8. Body bone-colour irrorated with black and fuscous brown, more thickly on collar and thorax; abdomen with clear segmental lines. Fore wings similar, the irrorations almost completely obscuring ground-colour, except on a narrow basal space, and on lines which are of ground-colour; antemedial lunular, outwardly edged by a fine fuscous line; orbicular very small, whitish; a fine fuscous medial line across reniform, which is narrow, black, inwardly marked with a white point; postmedial fine, wavy, dentate, widest on costa; subterminal forming irregular outcurves; a terminal interrupted fuscous line; cilia mottled with brown at base, crossed by a dark line and terminally spotted with fuscous. Hind wings bone-colour; transverse shades and terminal lines fuscous; medial shade faintly marked, postmedial and subterminal distinct; outer margin thickly irrorated with brown ;. base to postmedial thinly irrorated with fuscous. Fore wings below paler; subterminal line heavily shaded inwardly with fuscous on costa. Hind wings below thickly irrorated with fuscous brown; medial line more distinct, with blacker shading on discocellular; a streak from postmedial inbent to cell; postmedial and subterminal followed by clear bone-colour edging.

Expanse 27 mm. Hab. Sixola.

METACINIA, gen. nov.

Male,-Antennæ with short cilia. Palpi flat, upcurved,

barely reaching thorax, smoothly scaled. Fore tarsi partly concealed by long process from base. Fore wings narrow; vein 3 from before lower angle; 4 and 5 from lower angle; 6 from near upper angle; 7 from upper angle; 8, 9, 10 stalked from end of cell. Hind wings narrow; anal angle truncated from vein 2; veins 3 and 4 and 6 and 7 shortly stalked; vein 5 from near lower angle.

Type of genus, Metacinia limonalis, Schs.

Metacinia limonalis, sp. n.

2. Palpi upcurved, reaching well above head; antennæ thinly ciliated. Head and thorax dark lilacine brown; abdomen fuscous brown. Fore wings lilacine brown, shading to dull reddish brown before terminal space, which is thickly irrorated with white, inwardly limited by a lunular subterminal white line, and outwardly limited by a fuscous dentate lunular line; a fine reddish-brown antemedial line; a fine vertical medial shade and a fine dentate lunular postmedial line, also vertical; a black point as orbicular; a white point as reniform; cilia fuscous grey mottled with white. Hind wings fuscous brown; a subterminal whitish line at anal angle; a terminal fuscous line. Fore wings below fuscous grey, hind wings paler; an indistinct darker postmedial line; a pale subterminal line inwardly darker shaded.

Expanse 29 mm.

Hab. Limon, Sixola, Juan Vinas.

A male from French Guiana only differs in having the third joint of palpi a trifle longer. This is figured in the 'Biologia' as *theroalis*, Wlk., but is not that species, which also differs in neuration.

Drepanopalpia arenacea, sp. n.

3. Palpi outwardly pale lilacine brown, with a line of black irrorations along upper edge, the tufts on third joint pale yellowish. Head, collar, and thorax pale lilacine-brown thinly irrorated with black. Abdomen paler, irrorated with dark brown, more thickly on terminal segments. Fore wings pale lilacine brown with some pale orange-brown shadings, and a few scattered dark scales; traces of a very fine, irregular antemedial line; reniform pale brown with some black irrorations; a fine dark postmedial lunular line, slightly incurved below vein 3; termen broadly dark lilacine grey, preceded by a faint brownish shade and crossed by a row of subterminal pale points on veins; a terminal lunular black line. Hind wings whitish, with some brown irrorations beyond middle; a fine lunular postmedial line; termen broadly shaded with dark greyish brown crossed by a subterminal whitish line; a dark terminal lunular line. Fore wings below dark grey in disc, a black point at end of cell, fine postmedial line, and broad subterminal fuscous shade from costa, narrowing towards inner margin. Hind wings below white on inner area, pale buff on costa and termen with dark irrorations; a dark discal spot; a fine lunular postmedial line; a subterminal dark shade.

Expanse 30 mm.

Hab. Poas.

Bleptina? infausta, sp. n.

Q. Body fuscous brown, head, collar, and thorax tinged with purple-black; a few whitish irrorations on abdomen. Fore wings dark brown; base and medial space tinged with lilacine slate-colour; lines dull, darker brown; a subbasal, geminate antemedial, and geminate postmedial line; a black point in cell; an irregular dentate subterminal line, faintly marked, bluish white, followed by similar irrorations on margin. Hind wings black; a large white spot from base to beyond middle of wing. Underneath black, the white space on hind wing as above.

Expanse 34 mm.

Hab. Turrialba.

Veins 8, 9, 10 stalked from end of areole.

Bleptina obscura, sp. n.

9. Body and wings very dark brown, the lines darker richer brown. Fore wings: antemedial line faintly outcurved; a broad medial shade, indistinct, crossing end of cell; two white spots on discocellular; postmedial slightly outcurved; an interrupted whitish subterminal line from costa to vein 3; a terminal dark line expanding into spots. on interspaces. Hind wings: a postmedial line, very faint towards costa. Wings below dull greyish brown; a faint medial line; a more distinct postmedial line; hind wings with a subterminal line followed by a grey shade, and a dark point on discocellular.

Expanse 31 mm. Hab. Guapiles.

Mamerthes gangaba, sp. n.

3. Palpi whitish buff above, laterally streaked with black

Heterocera from Costa Rica.

and brown. Head, collar, and thorax fuscous brown. Abdomen dark with pale segmental lines. Fore wings dark lilacine grey tinged with brown; base to antemedial paler, crossed by a faint lunular subbasal line, and with a dark spot at base of median; antemedial yellowish buff, somewhat incurved across cell, outbent on inner margin, outwardly dark-edged, and followed below cell by an oblique velvety brown-black spot; orbicular horizontally oval, dark-edged, containing some yellowish scales; reniform large, broad, velvety brown-black, crossed by a crescent-shaped yellow line; postmedial yellowish, finely edged with brown-black scales, and followed by a dark spot below vein 7; an irregular line of dark scaling subterminally, forming a spot near apex; small terminal black spots. Hind wings dull brown-grey. Wings below paler; markings more pronounced on hind wings, with larger discal spot; a postmedial line and subterminal shade, which on costa of fore wings is broad and preceded by a pale shade.

Expanse 33 mm. Hab. Poas.

GOROSINA, gen. nov.

Female.—Antennæ ciliated. Palpi : second joint long, obliquely ascending; third short, angled back; both joints with long fringe of hair above: Fore wings broad; costal margin convex, apex acute; outer margin slightly oblique; vein 3 from well before lower angle; 4 and 5 from lower angle; 6 from upper angle; 7-10 stalked; 11 free. Hind wings: veins 3 and 4 stalked; 5 from lower angle; 6 and 7 on short stalk.

Type of genus, Gorosina ampla, Schs.

Gorosina ampla, sp. n.

2. Palpi dark brown, fringed above with long fuscous hairs, thinly irrorated with grey; base below shaded with buff. Head, collar, and thorax fuscous, irrorated with grey, the patagia outwardly reddish brown. Abdomen above brown shaded with fuscous; pale lateral segmental spots. Fore wings light brown, darker on basal half; costal margin tinged with grey; inner margin finely fuscous; a fine dark antemedial line, angled on costa, inbent to median, outcurved below cell, and again somewhat inbent; spots whitish grey, the orbicular small, the reniform moderate, somewhat inbent; medial line beyond cell, fuscous brown, angled at vein 8, and slightly sinuous to middle of inner margin; postmedial line fine, dark brown, deeply lunular with points on veins; subterminal white points shaded with fuscous on veins, the point on vein 7 black. Hind wings shaded with fuscous on termen; medial an 1 postmedial fuscous lines, the latter finely dentate; subterminal spots as on fore wing. Fore wings below greyish brown; a small black orbicular spot; reniform narrow, outlined in fuscous brown, containing a greyish streak; medial line faint; postmedial less lunular; a subterminal white line followed by a black spot on vein 7. Hind wings browner; a black point in cell; a larger spot on discocellular; the medial and postmedial lines fainter; the subterminal spots as above.

Expanse 40 mm. Hab. Tuis.

EPIPHANIS, gen. nov.

Male.—Antennæ pectinated. Palpi upcurved at base and porrect, the third joint turned back, slender, long, and with tufts at end. Fore wings: vein 3 from near lower angle; 4 from lower angle, 5 close above it: 6 from near upper angle; 7 from upper angle; 8, 9, 10 stalked from cell. Hind wings: veins 3 and 4, and 6 and 7, on short stalk; 5 from near lower angle.

Type of genus, Epiphanis esperanzalis, Schs.

Epiphanis esperanzalis, sp. n.

3. Antennæ pectinated. Palpi: first joint upturned; second long, porrect; third three times as long as second, with long hairs at end. Head buff; collar and thorax dark purple-brown. Abdomen dull fuscous purple. Fore wings brown tinged with purple, irrorated with dull lilacine on termen; the markings fuscous brown; a spot at base; an irregular antemedial line, slightly outbent, inwardly shaded with dull lilacine; orbicular small, round; reniform crossed by a paler line, its outer edge suffusing with a narrow, interrupted medial shade; postmedial dentate, interrupted, vertical to vein 5, slightly outcurved to 3 and incurved below it; a broad subterminal shade, limited by a fine pale buff line, sinuous and rather deeply inbent between veins 5 and 6; a coarse terminal dentate lunular black line. Hind wings dark brown ; postmedial and subterminal darker shades, the latter outwardly pale-edged, some marginal greyish irrorations; terminal line as on fore wings. Wings below greyish irrorated with brown ; the lines finely dentate. dark brown; discal spots; terminal line forming triangular spots on interspaces.

Expanse 33 mm. *Hab.* Esperanza.

PAROMIA, gen. nov.

Male.—Antennæ pubescent, ciliate. Palpi curved back, reaching thorax behind, smoothly scaled, the third joint fringed with long hairs. Legs stout, smoothly scaled. Fore wings broad; costa straight; outer margin slightly rounded; vein 3 from lower angle of cell; 4 and 5 above it, apart; vein 6 from upper angle; areole narrow; veins 7, 8, 10 from end of areole, 9 stalked with 8. Hind wings broad, the outer margin rounded; veins 3 and 4, and 6 and 7, on short stalk; 5 from near lower angle.

Type of genus, Paromia nigripunctata, Schs.

P. lysandria, Dr., has the fore tibiæ thickly clothed with hairs.

Paromia nigripunctata, sp. n.

3. Body grey-brown tinged with lilacine. Fore wings dull lilacine; costa finely ochreous brown; antemedial line fine, nearly vertical, olive-brown; a similar broad medial shade; a fine postmedial line suffusing with medial shade below cell; a broad subterminal shade, its outer edge darker shaded; terminal dark brown points on interspaces; orbicular a black point; two black points on discocellular. Hind wings fuscous brown, darker shaded subterminally. Wings below brownish; faint postmedial and subterminal lines. Hind wings somewhat shaded with lilacine grey; a small discal spot.

Expanse 30 mm.

Hab. Juan Vinas.

Smaller, paler coloured than S. lysandria, Dr., and easily distinguished by the black spots.

TARISTA, gen. nov.

Male.—Antennæ pubescent, ciliate, with raised tuft about middle of shaft. Palpi upturned, second joint fringed with hair above, third joint very short. Fore tarsi with long tufts of hair. Fore wings narrow; vein 2 from just beyond middle of cell; 3 from before lower angle; 4 and 5 from lower angle; 6 from below upper angle; areole narrow. 7, 8, and 9 on long stalk, 10 from end of areole. Hind wings: veins 3 and 4, and 6 and 7, from angles; 5 from near lower angle.

Type of genus, Tarista morosa, Schs.

Tarista morosa, sp. n.

3. Palpi dark brown. Head, collar, and thorax dark purplish brown. Abdomen fuscous brown. Fore wings purplish brown; antemedial fine, lunular, outbent, black; orbicular yellow-brown circled with black; a faint fuscous medial line; reniform large, round, yellow-brown, containing a curved black line near inner edge; postmedial dentate, fuscous, indistinct; a fine greyish subterminal line, sinuous and partly dentate; terminal fuscous streaks between veins, ending in small points. Hind wings fuscous brown; a postmedial black shade from vein 2 to inner margin where it expands; a faint subterminal line, edged with whitish scales towards anal angle. Wings below fuscous; black discal points and postmedial line; a subterminal line on hind wings.

Expanse 30 mm. Hab. Juan Vinas.

Tarista rufipalpis, sp. n.

2. Palpi reddish, the joints tipped with white. Head, collar, and thorax reddish brown. Abdomen fuscous. Fore wings reddish brown, darker shaded on interspaces beyond medial line, and below vein 6 to margin ; antemedial darker tinged, vertical, slightly outset below cell; orbicular a black point; medial line outcurved in cell; reniform fuscous mottled with whitish-blue scales, similar irrorations scattered over outer half of wing; postmedial outcurved, sinuous; a subterminal bluish-white line, incurved opposite cell and on inner margin, otherwise indistinct, followed at tornus and between veins 4 and 7 by pale irrorations, which also form an edging to the terminal fuscous line. Cilia yellow-buff mottled with black. Hind wings fuscous : a faint darker postmedial and subterminal line; some bluish-white scaling before terminal black line. Hind wings below fuscous brown irrorated with bluish white; a black discal spot and postmedial line; a subterminal whitish line on both wings.

Expanse 37 mm.

Hab. Poas.

In this species the palpi are longer than in male type of genus, but the third joint is proportionately short; on hind wings veins 4 and 5 are stalked, 6 and 7 more shortly so.

Tarista innocua, sp. n.

3. Body dull dark brown, some whitish irrorations on abdomen. Wings dull greyish brown, lines dark brown. Fore wings: antemedial line fine, outangled close below cell, inangled on submedian; orbicular darkly outlined, containing a buff-brown centre; a broad medial shade suffusing with inner edge of reniform, which contains a light brown shade; postmedial line fine, sinuous, dentate; subterminal dark shade more heavily marked, dentate and parallel with postmedial; terminal dark points partly connected by a line. Hind wings: postmedial and subterminal shades more heavily marked towards inner margin, and partly edged with white irrorations; a terminal dark line. Hind wings below greyish white irrorated with brown; a brown line on discocellular; postmedial and subterminal finely wavy lines.

Expanse 23 mm. Hab. Poas.

Aristaria nigrifrons, sp. n.

 φ . Palpi and frons black; vertex and collar outwardly brownish ochre; collar medially and thorax steel-grey, iridescent. Abdomen fuscous. Fore wings dark brown; extreme costa brownish ochre, edged behind with steel-grey; lines darker brown, indistinct; antemedial lunular, slightly outbent; medial across end of cell; postmedial vertical; outer margin thickly irrorated with bluish white, crossed close to its inner edge by a brown lunular line. Hind wings fuscous brown, some terminal whitish scales between veins 2 and 4. Wings below fuscous brown, darkest along outer margins; a faint discal spot and postmedial line on hind wings.

Expanse 33 mm. Hab. Juan Vinas.

Aristaria scortea, sp. n.

2. Palpi buff-brown with darker irrorations and shadings on fringe above. Head, collar, and thorax brown. Abdomen lilacine grey, irrorated with dull greyish brown and with pale segmental lines. Fore wings light brown; some dark scales at base; antemedial line fine, dark, wavily outbent, inangled on submedian; an orbicular black point; reniform incurved, edged with dark scales; postmedial line fine, black, lunular, incurved opposite cell and below vein 2; a subterminal dark lunular shade, followed by small clusters of dark scales on interspaces; apex shaded with fuscous grey; terminal black lines on interspaces. Hind wings suffused with grey; a fine postmedial fuscous line, vertical on costa, slightly sinuous below vein 7, dentate below vein 4; a broad subterminal dark grey shade followed by a fine irregular line; a black terminal line interrupted by veins. Wings below paler; black discal spots; the postmedial line more heavily marked on hind wings.

Expanse 30 mm.

Hab. Juan Vinas.

Tortricodes furrina, sp. n.

9. Palpi upcurved, third joint slightly tufted above, brown, finely irrorated with buff. Body and fore wings brownish grey, tinged with lilacine; some paler irrorations on abdomen. Fore wings thinly irrorated with brown ; lines fine, darker ; antemedial line more heavily marked on costa, where it is outcurved, then wavy, vertical; postmedial line sinuous, vertical ; a large black-brown spot as reniform ; postmedial fine, lunular, the lunules incurved opposite cell, otherwise outcurved; subterminal line defined by narrow darker edging; terminal dark spots. Hind wings duller, not tinged with lilacine ; postmedial line fine, dark, vertical, angled below vein 2 : subterminal defined by darker shadings, downbent to termen below vein 2. Fore wings below paler, duller; hind wings buff-white irrorated with brown; a fine postmedial dark line; the subterminal indistinct; black discal spots, preceded on hind wings by a short dark streak in cell.

Expanse 28 mm.

Hab. Juan Vinas.

Fore wings without areole; veins 7-10 stalked.

Hypena hicetasalis, sp. n.

9. Palpi, head, collar, and thorax fuscous grey, mottled with dull grey. Abdomen dull fuscous, the basal dorsal tuft like thorax. Fore wings grey irrorated with fuscous brown; a clearer pale grey shade along median and submedian to postmedial; antemedial brown line indistinct, chiefly noticeable on inner margin; postmedial dark brown, slightly incurved on costa, angled and inbent with a slight angle on fold, followed by a broad whitish-grey shade, biturcating to apex; a broad fuscous shade from termen below apex to inner margin, edged below vein 5 by parallel black lines; veins terminally streaked with black; marginal greyish shadings below vein 5, interrupted by a black shade above submedian; a terminal black line, thickening at veins; cilia with a pale line at base. Hind wings dull fuscous. Wings below dull fuscous grey; faint traces of a postmedial darker line; a fine terminal fuscous-brown line.

Expanse 28 mm.

Hab. Juan Vinas, Banana River.

Hypena fufialis, sp. n.

2. Palpi roseate brown irrorated with dark brown. Head, collar, and thorax lilacine grey. Abdomen above fuscous grey ; a velvety brown dorsal tuft at base ; underneath whitish buff. Fore wings: a whitish-buff shade in and just below cell, limited below by a black-brown line to postmedial; costal margin broadly lilacine with scattered brown irrorations; inner margin to postmedial similar; a small black spot at base of cell ; antemedial fine, brown, indistinct, followed in cell by a small velvety black spot; a minute black dot on discocellular behind, and traces of one in front; postmedial fine, dark brown, downcurved and acutely angled at vein 6, then inbent, straight, slightly outset at fold, followed by a whitish-buff shade from inner margin to vein 6, where it diverges to apex ; a broad fuscousbrown shade from termen at apex to inner margin, expanding to termen from apex to vein 4, below which the termen is shaded with lilacine buff, with darker irrorations ; a terminal fuscous line, inwardly edged with pale lunules. Hind wings fuscous grey; a terminal velvety black line; cilia buff at base, crossed by a fine darker geminate line and tipped with white. Hind wings below whitish, dusted with grey; the terminal line distinct; a dark shade on discocellular.

Expanse 24 mm. Hab. Juan Vinas.

Hypena miranda, sp. n.

3. Palpi, head, collar, and thorax greyish brown, the scales faintly paler tipped. Fore wings brown, slightly tinged with red medially, the lines dark reddish brown; antemedial line outbent to fold, incurved, and vertical on inner margin, where it is inwardly shaded with some whitish scales : postmedial line outangled beyond cell; a darker line on discocellular; small subterminal dark spots outwardly pale shaded; a terminal narrow darker shade. Hind wings fuscous brown; cilia tipped with whitish. Wings below fuscous grey; no markings.

Expanse 36 mm.

Hab. Sixola, Banana River.

Hypena tithonalis, sp. n.

9. Palpi, head, and thorax brown. Abdomen fuscous. Fore wings : basal half reddish brown, limited by the postmedial line; some dark irrorations at base; antemedial line fine, dark brown, outcurved on costa and cell, and irregularly outcurved below cell; a medial black shade, heaviest in cell and above submedian; postmedial line fine, whitish buff, inwardly edged with dark brown, slightly inbent on costal margin, faintly curved beyond cell, and very slightly outbent from median to inner margin; outer half fuscous grey, almost black; small subterminal black spots; apex and tornus shaded with grey; a terminal black line inwardly shaded with light brown; cilia dark grey, crossed by two fine darker lines. Hind wings fuscous brown. Wings below dark grey; costa of fore wings, and the hind wings, irrorated with brown; fuscous discal points; an interrupted terminal dark line; subterminal small black spots on fore wings.

Expanse 27 mm. Hab. Juan Vinas. Near H. bergealis, Schs.

Hypena cæruleopicta, sp. n.

9. Palpi buff-brown, darkly irrorated. Head, collar, and thorax dark brown somewhat irrorated with lilacine. Abdomen fuscous grey; a dark brown dorsal tuft at base. Fore wings fuscous brown, thinly irrorated with bright blue scales; antemedial line vertical, lunular, dark reddish brown, inwardly edged with dark lilacine grey; orbicular small, black; reniform a black line, edged with pale brown; postmedial dark reddish brown, very slightly inbent, sinuous, outwardly edged with dark lilacine grey; subterminal coarse, black, somewhat macular, sinuous inversely to postmedial, outwardly edged with pale blue; cilia fuscous tipped with pale reddish brown; inner margin straight. Hind wings brownish grey; a black shade at anal angle, and one on termen at vein 2; cilia light brown. Fore wings below fuscous grey, the costa irrorated with buff and brown; traces of postmedial and subterminal lines, the latter with black and white spots near costa. Hind wings below greyish irrorated with dark brown, the veins light brown; a fuscous discal point; a fine postmedial line; a subterminal black shade at anal angle.

Expanse 34 mm. Hab. Poas, Turrialba.

Pterhemia exscissa, sp. n.

3. Palpi fuscous grey. Body and wings dull brownish grey, the latter thinly irrorated with dark brown, Fore wings : traces of a fine lunular antemedial line ; orbicular a black point; reniform a white point; postmedial straight, inbent, consisting of a fuscous-brown shade, outwardly edged with buff and a pale brown line; a subterminal fuscous spot from above vein 5 to above 6, inwardly edged by a fine buff line which continues to inner margin; a smaller fuscous spot above vein 6, nearer termen, and a small terminal spot above 7; apex shaded with buff; a very fine terminal dark line. Hind wings: outer margin above vein 3 to costa broadly excised; costal half grey, thinly scaled; below vein 3 like fore wings, with postmedial and subterminal lines. Wings below paler, thinly irrorated with brown; a buff spot at apex of fore wings; hind wings with a dark streak on discocellular, the space beyond cell thinly scaled.

Expanse 27 mm. Hab. Banana River.

Gustiana undilinea, sp. n.

3. Palpi brown with pale irrorations. Body brownish grey, the abdomen paler than thorax. Fore wings brownish grey, paler on terminal third, and with darker irrorations; lines fuscous brown; antemedial inbent in cell, outcurved to submedian, and again on inner margin; a dark shade on discocellular; postmedial outcurved beyond cell, slightly inbent at vein 4, and sinuous to inner margin; a faint darker subterminal shade; terminal fuscous spots. Hind wings whitish irrorated with brownish grey, more so terminally and at apex; terminal fuscous spots. Fore wings below fuscous grey; traces of postmedial line. Hind wings below with fewer irrorations.

Expanse 22-26 mm. Hab. Juan Vinas, Tuis.

Boletobia tenebrosa, sp. n.

S. Body and wings fuscous faintly tinged with brown. Wings: the termen greyish buff, thickly irrorated with fuscous, leaving a subterminal clearer buff shade. Wings below fuscous grey, thickly and coarsely irrorated with fuscous brown.

Expanse 13 mm. Hab. Sixola.

Boletobia turpis, sp. n.

3. Body fuscous. Wings brown, thickly irrorated with fuscous, and with faint traces of an antemedial, postmedial, and subterminal dark line, very confused and indistinct. Fore wings: a minute lighter brown medial spot on costa, and pale points towards apex. Wings below dull greyish, more thinly irrorated with fuscous; the postmedial line slightly outbent on fore wings; the subterminal shade cut by veins.

Expanse 20 mm. Hab. Cachi.

LUTOGONIA, gen. nov.

Female.—Antennæ minutely ciliated. Palpi porrect, twice the length of head, the second joint fringed below with long hairs, the third smoothly scaled, the tips blunt. Legs smoothly scaled. Fore wings: costal margin straight, outer margin rounded; vein 3 from before lower angle; 4 and 5 from lower angle; 6 from upper angle; areole very narrow, 7 from end, 8, 9, 10 stalked; 11 free. Hind wings: outer margin slightly incurved opposite cell; veins 3 and 4 from a point; 5 from lower angle; 6 and 7 from upper angle.

Type of genus, Lutogonia simplex, Schs.

Lutogonia simplex, sp. n.

2 Palpi, head, collar, and thorax buff-brown. Abdomen buff-grey irrorated with brown. Fore wings light brown, shaded with dark brown beyond cell to costa before apex; a broad white streak on discocellular which is oblique; a fine terminal dark line, lunular; cilia dark brown. Hind wings white; a dark terminal line, preceded by some light brown irrorations; cilia buff mottled with dark grey. Hind wings below white, the costa darkly irrorated ; a dark discal spot ; traces of a subterminal brown shade.

Expanse 19 mm. Hab. Juan Vinas.

UZINIA, gen. nov.

Male.—Palpi obliquely ascending, barely reaching above head, moderately scaled, the third joint minute. Antennæ fascieulate. Legs smooth; fore tibiæ with longer hairs. Abdomen with dorsal tuft at base. Fore wings: costa slightly convex; outer margin obliquely rounded; vein 3 well before angle of cell; 4 and 5 from lower angle; 6 from close to upper angle; areole narrow; veins 7, 8, 10 from end of areole, 8 and 9 stalked. Hind wings: veins 3 and 4 from lower angle; 5 slightly above angle; 6 and 7 from upper angle.

Type of genus, Uzinia hyas, Schs.

Uzinia hyas, sp. n.

3. Palpi and head dark brown. Collar and thorax brown. Abdomen greyish brown. Fore wings light brown, darkly irrorated, the outer margin shaded with fuscous; antemedial line indistinct, buff-brown, inangled in cell, crossing below cell a fuscous-grey shade; a fuscous shade along costa to postmedial; this line finely wavy, slightly inbent, on costa buff divided by a fine dark line, from below vein 7 white with fine dark edging; a subterminal dark sinuous line, faintly edged outwardly with white irrorations; the terminal black line fine, edged with light brown; cilia fuscous. Hind wings dark grey, the cilia mottled with light brown towards apex. Hind wings below white irrorated with grey-brown, chiefly on costal half; a faint discal point.

Expanse 16 mm. Hab. Esperanza, Sixola.

Ocalaria pavo, sp. n.

2. Body dull brownish grey, the collar shaded with brown; basal segment of abdomen buff-white, overlapped by fuscous hairs on thorax. Wings buff-white, thickly irrorated with brownish grey except along outer edge of the dentate postmedial, and inner edge of the dentate subterminal darker lines, the space between them grey-black shot with golden brown; a marginal dark lunular line. Fore wings: an irregular vertical antemedial dark line, inwardly pale-shaded; a large black ocellus at end of cell edged with yellowish white, and containing a white point; the medial line fine, dark, outcurved close around the ocellus, and immediately followed by the reniform, which is long and narrow, slightly curved, white, containing a dark line; a round black spot at apex containing a white point on its costal edge. Hind wings: a straight dark medial line, and dark shade on discocellular, the latter partly paler edged. Wings below whiter, the lines similar but reduced; the medial line on fore wings not reaching inner margin; the ocellus and apical spot as above.

Expanse 28 mm. Hab. Sixola. Allied to O. oculata, Dr.

POROSANA, gen. nov.

Male.—Palpi upcurved, barely reaching vertex, smoothly scaled, with very short fringe on second joint below; the third acute, one-third as long as second. Antennæ pubescent. Legs smoothly scaled; spurs on hind tibiæ long; abdomen short. Fore wings narrow; veins 3, 4, 5 from lower angle; 6 from close to upper angle; 7–10 on long stalk, 7 from before 10; 11 free. Hind wings: veins 3 and 4 on long stalk; 5 from near middle of discocellular; 6 and 7 from upper angle.

Type of genus, Porosana uruca, Schs.

Porosana uruca, sp. n.

3. Palpi, head, collar, and thorax fuscous brown : a large white spot on thorax behind extending on basal segments of abdomen ; abdomen otherwise fuscous. Fore wings fuscous brown to postmedial line, the termen dark slate-colour ; the scales forming transverse striæ ; antemedial and postmedial lines outcurved, brownish, marked by white streaks on costa and geminate white points on interspaces ; a marginal dark brown line, inwardly edged with white, outwardly with light brown, preceded by a white spot on submedian fold; cilia dark slate-colour, tipped with white at vein 5 and below apex. Hind wings brownish grey ; a dark discal point ; a dark brown terminal line, outwardly edged with whitish brown ; cilia partly tipped with white. Wings below silky grey ; a postmedial white streak on costa of fore wings and small apical white shade. Hind wings: a dark discal point; a whitish subterminal line and similar shade at anal angle.

Expanse 19 mm.

Hab. La Uruca.

I am indebted to Mr. Dognin for a specimen of this species.

Rhæsena darconis, sp. n.

2. Palpi, head, and collar yellowish buff irrorated with ochreous, sometimes browner. Thorax lilacine brown. Abdomen greyish brown irrorated with purple-red. Fore wings brown tinged with lilacine; base slightly darker; antemedial line outcurved, vaguely indicated by pale scales preceded by a rust-brown shade; orbicular annular, faintly marked; a fine, straight, lilacine medial line, outbent from costa to inner margin, broadly shaded inwardly with rustbrown; reniform faintly indicated by some dark points; a curved brown postmedial line from subcostal to vein 4, followed by some rust-brown shading; a fuscous subterminal line, inangled on vein 5; termen shaded with rust-brown. Hind wings fuscous brown. Fore wings below fuscous, the apex tinged with yellowish buff. Hind wings below partly shaded with yellow-buff and irrorated with dark brown; a small dark discal spot, postmedial line, and subterminal shade. Expanse 22 mm.

Hab. Sixola, Banana River. Near C. lea, Druce.

Rhæsena melicerta, sp. n.

2. Palpi dark brown, points tipped with buff. Head, collar, and thorax dark brown; some light reddish-brown scales on vertex; some lilacine irrorations on collar and thorax. Abdomen above fuscous brown; some grey scaling terminally. Fore wings brown, darkest at base, medially and subterminally; lilacine blue irrorations at base, outwardly on lines, in cell medially, and on termen from vein 4 to tornus, also before postmedial on costa, beyond cell, and on inner margin; lines black, antemedial outbent, incurved between veins ; postmedial lunular, twice outcurved, inangled on vein 2; orbicular and reniform indistinct, small, linear; subterminal shade expanding between veins 4 and 6, cut by a whitish streak at vein 6. Hind wings fuscous brown. Fore wings below fuscous, the costa tinged with lilacine brown; a black postmedial line. Hind wings below tinged Ann. & Mag. N. Hist. Ser. 8. Vol. xi. 3

with lilacine, the inner margin whitish, and irrorated with fuscous brown; a dark discal spot and very distinct postmedial line; a fuscous subterminal shade.

Expanse 30 mm.

Hab. Sitio.

Close to Platydia rufinalis, Wlk., but of a different colour.

Dercetis? plumbea, sp. n.

9. Body and wings leaden grey, the two basal segments of abdomen paler. Fore wings: lines thick, orange-brown; a basal line on costa and cell; antemedial very slightly inbent, mottled with black-brown scaling; a small yellow spot in cell medially close to subcostal and a streak on costa beyond it; a spot on discocellular irrorated with blackbrown; postmedial also irregularly mottled with blackbrown, inangled at vein 5 and slightly outcurved to submedian fold and again to inner margin; termen sinuous. Hind wings tinged with brown; a dark postmedial outcurved line and indistinct subterminal shade. Wings below paler; fore wings with a dark postmedial line; hind wings with a large black-brown spot on discocellular, preceded by a smaller spot in cell; a similar postmedial fine line and small terminal spots above and below vein 6.

Expanse 14 mm. Hab. Sixola.

Mecynoptera convergens, sp. n.

9. Palpi orange, mottled with dark brown outwardly. Head and collar orange irrorated with reddish brown. Thorax purple-brown. Abdomen dark reddish brown, tinged with orange terminally, and with dark grey segmental lines. Fore wings purple-brown; an outcurved darker brown antemedial line, interrupted by the annular orbicular spot; an outbent medial and an inbent postmedial dark brown shade almost meeting on inner margin; the reniform very large, outlined in dark brown; the medial line outwardly edged with white on costa; subterminal fuscous spots almost forming a line and a marginal dark shade at vein 3; an almost terminal fine dark line. Hind wings fuscous brown. Fore wings below brown; the costal margin, apex, and termen orange finely irrorated with dark brown; the inner margin white; a brown spot at end of cell; a dark postmedial line from costa to vein 4. Hind wings orange irrorated with dark brown ; a dark discocellular streak and fine postmedial line.

Expanse 29 mm. Hab. Esperanza.

PENOMIA, gen. nov.

Male.—Antennæ pubescent, ciliate. Palpi upcurved, the third joint longer than second, upturned, with long tufts from its base on inner side. Fore tibiæ hairy. Wings long and narrow. Fore wings: costal margin with fold below at base, medially slightly depressed; veins 3, 4, 5 close together from lower angle of cell; 7, 8, 10 from arcole, 9 stalked with 8. Hind wings: veins 3 and 4, and 6 and 7, on short stalk; 5 from near lower angle.

Type of genus, Pænomia turpis, Schs.

Pænomia turpis, sp. n.

3. Palpi, head, collar, and thorax fuscous, thinly irrorated with yellowish scales; third joint of palpi with long tufts of whitish hairs. Abdomen fuscous grey above, underneath buff-brown, with dark segmental lines. Wings fuscous tinged with olive-brown, the markings darker, partly defined by pale edging. Fore wings: a subbasal line; antemedial vertical, slightly lunular; a medial shade; postmedial lunular, dentate, vertical to vein 5, then slightly outcurved ; subterminal fine, indistinct, whitish grey. Hind wings : a line on discocellular; postmedial and subterminal broad, the latter outwardly pale-edged; terminal white points between veins on both wings. Fore wings below fuscous grey; a dark discal point; a faint darker postmedial line; a whitish subterminal line. Hind wings whitish irrorated with fuscous grey, forming postmedial, subterminal, and marginal shades, all rather broad; discal spot well marked.

Expanse 35 mm. Hab. San José.

Pænomia maculata, sp. n.

2. Palpi, head, collar, and thorax fuscous tinged with lilacine; third joint of palpi ringed and tipped with grey. Abdomen fuscous above with dorsal tufts, underneath whitish grey. Fore wings fuscous tinged with lilacine, the markings velvety black; a basal and broad subbasal shade, the latter expanding just above submedian, and closely followed by a very fine antemedial line, parallel to its outer edge and tinged with reddish brown above and below submedian; orbicular small, round, dull black; a geminate outcurved medial line, broken into spots from cell to inner margin; reniform large, its outer edge incurved; postmedial outcurved, consisting of small quadrate spots, followed by

3*

smaller grey and black spots on veins; a subterminal dentate black shade, more noticeable above vein 4; small black marginal spots. Hind wings fuscous brown; some black shading and a short white line on inner margin near anal angle; small black marginal spots. Fore wings below fuscous grey; faint traces of a discal spot, medial, postmedial, outer, and subterminal lines. Hind wings below whitish irrorated with brownish grey, forming three lines beyond the discal spot; terminal black spots on interspaces.

Expanse 33 mm.

Hab. Cartago.

Pænomia hiempsal, sp. n.

3. Palpi roseate brown at base, the third joint darkshaded, tufted with whitish hairs. Head, collar, and thorax dull olive-grey, the patagia with dark brown mottlings. Fore wings pale olive-green; base dark reddish brown, the outer edge straight, inwardly oblique from costa, crossed by a fine oblique pale line; the costa narrowly black; an antemedial black spot on costa and indistinct fine dentate brown line; orbicular spot small, mottled brown and whitish grey; a black medial spot and an irregular reddish-brown line, followed by a dull olive-brown shade to postmedial, enclosing the reniform, which consists of fine whitish lines, followed by a dark brown shade; postmedial line dark brown, irregular, incurved above inner margin, followed there and on costa by a pale olive-buff shade, and some bluish-white irrorations on interspaces between veins 2 and 7; a large triangular fuscous spot on costa before apex; termen above vein 5 whitish buff, with a subterminal brownish shade, below vein 5 dark brown crossed by a paler subterminal line, edged on either side with fuscous spots on interspaces; terminal black spots. Hind wings dark greyish brown, with darker transverse medial, postmedial, and subterminal shades, more heavily marked and irrorated with bluish-white scales between veins 2 and 5. Fore wings below grey-brown ; the costa and shade beyond postmedial yellowish; subterminal whitish, irregular; whitish irrorations terminally. Hind wings below white irrorated with brown; a dark discal spot and faint medial line; postmedial lunular dentate, distinct; subterminal somewhat geminate.

Expanse 25 mm. Hab. Tuis.

Rivula rufescens, sp. n.

3. Head, thorax, and fore wings brown tinged with reddish, the thorax and basal half of wings darker. Abdomen above fuscous brown; anal hairs light brown; underneath luteous, with black hairs at anus. Fore wings: a small white spot at base of costa and point subbasally above subcostal; small white spots faintly edged with black forming an irregular antemedial line; a white medial spot on costa, a fine line below it; spots in cell and below it; a point on discocellular; postmedial line also consisting of white points, outcurved, inbent opposite cell, and deeply incurved from veins 4-2, slightly outbent on inner margin; white costal spots towards apex; faint subterminal spots. Hind wings fuscous, thinly scaled in cell. Hind wings below whitish; costa tinged with yellow and thinly irrorated with brown; a dark discal point, postmedial line, and subterminal shade.

Female browner, darker, the white points less distinct.

Expanse 16 mm. Hab. San José.

Rivula nigripuncta, sp. n.

♂. Body buff-grey, the abdomen dorsally shaded with fuscous; anal hairs brownish. Fore wings buff-grey, thinly irrorated with brown; termen brown; cilia darker buff-grey, irrorated with dark brown, forming a central line and faint oblique lines; costa finely fuscous grey on basal third, then more broadly so, interrupted by four small white spots; a fine fuscous line, almost medial, inbent in cell to small fuscous orbicular spot; two small black spots on discocellular; an apical small black spot; marginal white points. Hind wings whitish, the veins and termen fuscous; a dark terminal line; cilia fuscous tipped with white, entirely white at anal angle.

Expanse 14 mm. Hab. Carillo, Sixola.

Rivula latipes, sp. n.

3. Antennæ with long finely ciliated pectinations. Palpi rich dark brown, shaded below with orange-brown. Head, collar, and thorax brown; patagia irrorated with lilacine white. Abdomen fuscous above, underneath whitish on basal half. Hind tibia and tarsi thickly tufted. Fore wings dark brown; a small, lilacine, black-edged spot at base of costa and a point beyond it above subcostal; an inbent bluish-white streak below cell; an irregular antemedial line of small lilacine spots, larger and whitish on costa; reniform very large, outlined in lilacine white, disconnected, inwardly vertical, outwardly angled on vein 7; an outer paler brown shade, twice outcurved, preceded by bluish points to vein 3, and by a white point on vein 2, with a white lunule above and below it; small white spots on costa apically, at apex, and along termen. Hind wings fuscous, the cilia mottled with luteous. Fore wings below fuscous grey; three conspicuous white costal spots on apical half. Hind wings below greyish white, the apex dark-shaded; a fuscous discal spot, postmedial line, and subterminal shade.

Expanse 22 mm. Hab. Carillo.

PRORIVULA, gen. nov.

Male.—Palpi obliquely ascending; second joint heavily fringed below, reaching above vertex, third smooth, very short. Antennæ bipectinate. Wings broad, outer margins slightly rounded. Legs smoothly scaled. Fore wings: veins 3, 4, 5 equally apart from lower angle of cell; 6 from close to upper angle; no areole; 7, 8, 9 stalked; 10 and 11 stalked. Hind wings: cell long; veins 3 and 4 from lower angle; 5 from well above angle; 6 and 7 from upper angle.

Type of genus, Prorivula leucosticta, Schaus.

Prorivula leucosticta, sp. n.

9. Palpi dark brown outwardly, inwardly and at base deep yellow. Head, collar, and thorax brown, the latter irrorated posteriorly with lilacine. Abdomen fuscous above, whitish underneath. Fore wings dark brown, thinly irrorated on base and postmedially with bluish grey; basal and subbasal lilacine spots; a similar fine streak below cell to near antemedial, which is outcurved, interrupted across cell, where there is a small inset spot, the line below cell broader, whiter, not extending below submedian; some lilacine points at end of cell; postmedial consisting of fine incurved lilacine lunules; a fuscous brown subterminal shade, followed by some minute lilacine clusters of scales; cilia tipped with dark grey. Hind wings fuscous; cilia tipped with whitish grey.

A male, badly broken, has the legs smoothly scaled, the

pectinations of antennæ shorter than in *R. latipes*, Schs., and the lilacine and whitish markings are differently placed.

Expanse 18 mm. *Hab.* Juan Vinas. Near *R. violetta*, Schs.

CARILLADE, gen. nov.

Male.—Palpi porrect, second joint twice the length of head, smooth, with slight fringe above. Antennæ pubescent, ciliate. Fore legs thickly scaled; base of fore tarsi with tufts. Fore wings: outer margin obliquely rounded; vein 3 from before lower angle; 4 and 5 from lower angle; 6 from upper angle; 7 from end of areole, also 8 and 9 on long stalk; 10 from areole above; 11 free. Hind wings: veins 3 and 4 very shortly stalked; 5 from elose to angle, 6 and 7 very shortly stalked.

Type of genus, Carillade harmonia, Schs.

Carillade harmonia, sp. n.

J. Palpi outwardly dark brown irrorated with buff. Head, collar, and thorax mottled dark and light brown; a similar tuft at base of abdomen. Abdomen above fuscons grey, with paler segmental lines. Fore wings mottled dark and light brown; costa narrowly black; a subbasal black line, buff on costa, followed by a small white spot in cell; an antemedial, fine, dark brown line, geminate, angled in cell, single, and edged with whitish buff on costal margin; reniform ochreous buff, inwardly edged by a curved blackbrown line; a buff shade above it on costa crossed by a fine black line inwardly edged with white, slightly outcurved beyond cell, edging remiform behind, inbent in cell and lunular to middle of inner margin, followed below cell by a broad ochreous-buff shade, thickly irrorated with white along submedian; a broad subterminal black shade from costa to vein 3, expanding towards termen between veins 4 and 3, and narrow from vein 3 to inner margin, followed by white shadings from vein 6 to apex; terminal space from vein 4 to tornus yellow-brown; a terminal thick black line, somewhat lunular; cilia fuscous brown mottled with light brown. Hind wings fuscous brown; a darker terminal line; cilia at base mottled with light brown. Fore wings below grey-brown, the costa dark brown; an oblique yellowish shade above discocellular; termen yellowish brown; a more distinct

whitish-yellow shade at apex. Hind wings below dirty white irrorated with brown, except on inner margin; a dark discal spot; postmedial shade outbent on costa, outwardly dentate above veiu 7 and below 6; subterminal dark shade, interrupted, chiefly noticeable at apex, between veins 5 and 6, and at anal angle.

Expanse 22 mm. Hab. Carillo.

EPISTREMA, gen. nov.

Male.—Palpi upcurved, short, reaching just above vertex; second joint shortly fringed below, third joint smooth. Antennæ pubescent, without cilia. Fore legs hairy. Abdomen with dorsal tuft at base. Fore wings: veins 3, 4, and 5 equally apart; 6 from upper angle; 7, 8, 10 from end of areole; 9 stalked with 8; 11 free. Hind wings: veins 3 and 4, also 6 and 7, very shortly stalked; 5 from above lower angle.

Type of genus, Epistrema ora, Schs.

Epistrema ora, sp. n.

3. Palpi, head, collar, thorax, and basal dorsal tuft on abdomen dark brown; abdomen otherwise brownish grey. Fore wings dark greyish brown, thinly irrorated with lilacine white scales; a broad antemedial light brown shade, edged with fuscous brown and crossed by a fine dark line, slightly inbent on inner margin; a fuscous line from costa above discocellular, incurved in cell and below vein 2, followed by a buff shade, broadest on inner margin, crossed by a diffuse brownish shade, and enclosing the reniform, which is narrow and vaguely outlined in dark scales; a subterminal dark brown shade, not reaching costa and twice incurved, outwardly paler shaded; terminal dark brown semilunar spots. Hind wings brownish; terminal spots indistinct; base of cilia greyish. Wings below greyish brown, the hind wings faintly paler, crossed by medial and subterminal darker shades.

Expanse 18 mm. Hab. Carillo.

Hypenodes modesta, sp. n.

2. Head and thorax greyish brown. Abdomen light brown. Fore wings brown, irrorated with grey on basal space, beyond discocellular, and broadly beyond postmedial line; an elongated dark brown spot filling end of cell; an

Heterocera from Costa Rica.

antemedial pale brown line, angled in cell and touching this spot; postmedial line light brown, vertical, almost straight; cilia fuscous, with pale brown mottlings. Hind wings dark grey, faintly tinged with brown.

Expanse 11 mm.

Hab. Carillo, Sixola.

Hypenodes dubia, sp. n.

2. Head and thorax grey-brown. Abdomen fuscous grey. Fore wings light brown, the costa shaded with dull grey; a dark brown streak above and below cell at base; antemedial yellowish defined by dark scaling, outangled at middle of cell, finely wavy and inbent to inner margin; a fuscous brown shade in cell from antemedial to discocellular, which is crossed by a white line; postmedial fine, yellowish white, oblique from costa to below vein 7, then vertical but wavily incurved; a fine terminal pale line, preceded by dark shadings above and below vein 6 and below vein 3; a faint pale shade from vein 7 to apex; cilia dark brown. Hind wings pale grey, slightly darker on discocellular.

Expanse 12 mm.

Hab. Sixola.

This species has vein 10 stalked with 8; 9 absent, as in *Hypenodes*, but veins 4 and 5 are stalked from lower angle of cell.

Arrade juba, sp. n.

3. Palpi, head, collar, and thorax mottled light and dark brown. Abdomen whitish, irrorated with brown; a black dorsal tuft at base and brown tuft on second segment. Fore wings brown tinged with lilacine; a fuscous shade below cell, interrupted by lines and expanding beyond postmedial; a dark shade on inner margin from base to antemedial; a black basal line, outangled in cell; antemedial line remote from base, fine, black, inwardly pale-edged, twice angled on costal margin, inbent from subcostal to inner margin, followed in cell by a fuscous shade to discocellular; postmedial line light brown, becoming whitish below vein 3, finely edged with black-brown, partly preceded by a pale shade, deeply outcurved around cell, then incurved to inner margin; a subterminal light brown sinuous line, preceded by fuscous shadings; a thick, interrupted, terminal brown-black line, finely edged with light brown. Hind wings whitish, the margins shaded with light brown. Fore wings below fuscous grey. Hind wings below white; the costal margin darkly irrorated; a spot on discocellular; interrupted postmedial and subterminal shades, the latter more heavily marked at anal angle and vein 5.

Expanse 15 mm. Hab. Carillo.

Arrade monæses, sp. n.

2. Palpi : second joint outwardly mottled yellow and purple-brown, third joint yellow. Head and collar white ; thorax whitish shaded with lilacine. Abdomen white, with transverse grey shades. Fore wings light reddish brown, strongly shaded with lilacine and thinly irrorated with black; the basal space lilacine, limited by the fine black antemedial line which is incurved in cell, inbent from median to inner margin; a black basal line not reaching inner margin; some black scaling on discocellular; postmedial line fine, black, not so well marked as antemedial, inwardly finely edged with white; outcurved around cell, then wavily inbent; a subterminal indistinct black line from costa, not traceable below vein 4. Hind wings white, faintly shaded with grey. Fore wings below mostly dull grey without markings. Hind wings below with a dark spot on discocellular, an interrupted postmedial line, and shade at anal angle.

Expanse 17 mm. Hab. Poas.

Leptoctenista pretiosa, sp. n.

J. Palpi dark brown, the third joint above and tip buff. Thorax fuscous brown. Head, collar, and patagia dark brown, mottled with buff and light brown. Abdomen above fuscous, ventrally buff. Fore wings brownish tinged with lilacine ; some dark irrorations on costa ; basal third in and above cell shaded with buff-white, this shade continuing as a downbent fascia to postmedial, enclosing below cell an elongate black-brown shade, slightly paler below submedian; orbicular a black point circled with white; an oblique dark shade on costa above it ; reniform a white line, preceded and followed by a black-brown shade; postmedial black, outcurved, deeply lunular, partly suffusing with a broad dark shade from apex, narrowing on inner margin ; a terminal coarse, wavy, fuscous line; cilia buff, slightly mottled with darker scales. Hind wings fuscous. Wings below pale buff; large fuscous-brown discal spots; outer line lunular dentate, remote from cell on hind wings; termen shaded with fuscous.-Female. Fore wings fuscous, irrorated with

dull lilacine-slate colour; the oblique fascia faintly tinged with brown; the black shade at base below cell smaller; orbicular and reniform small, black; the postmedial line and oblique shade suffusing with ground-colour; the termen narrowly light brown, on which the terminal line is distinct. Wings below fuscous brown, the spots and outer line very indistinct.

Expanse, 3 31, 9 32 mm.

Hab. La Florida, Sixola.

The female possibly belongs to another species.

ARTILOXIS, gen. nov.

Female.—Palpi porrect, twice the length of head; second joint with short fringe below; third joint short, smooth, slightly upbent. Antennæ simple. Fore wings: vein 3 before lower angle; 4 and 5 from lower angle, apart; 6 from upper angle; areole small; 7, 8, 10 from end of areole, 8 and 9 on long stalk; 11 free. Hind wings: cell short; veins 3 and 4 stalked; 5 well above lower angle; 6 and 7 very shortly stalked.

Type of genus, Artiloxis vitiosa, Schs.

Artiloxis vitiosa, sp. n.

J. Palpi, head, collar, thorax, and base of abdomen whitish buff irrorated with dark brown; abdomen otherwise grey, more thickly irrorated with brown. Fore wings pale buff thinly irrorated with brown ; the base and outer third tinged with yellow-brown; some black scales at base of costa and cell; some small subbasal spots; an antemedial fuscous-brown line, thickest on costa, and not reaching below submedian fold; a small fuseous-brown orbicular spot, and a similar point on discocellular ; postmedial wavy, outcurved beyond cell, fine, brown, originating from a fuscous spot on costa above discocellular; subterminal defined by fuscous shades preceding it, and others following it to termen except at apex; these outer shades mottled with buff-brown from vein 4 to tornus ; a terminal lunular black line ; cilia with fuscous spots. Hind wings fuscous brown. Fore wings below fuscous, the costa buff. Hind wings below buff irrorated with brown ; a dark discal spot, very fine medial line, and more heavily marked postmedial line; a faint subterminal shade, and interrupted dark brown terminal line.

Expanse 24 mm. Hab. Sixola.

LEPTERIA, gen. nov.

Male.—Antennæ ciliated. Palpi porrect, hairy, twice the length of head, fringed above with longer hairs at base. Legs smoothly scaled. Fore wings : apex acute, outer margin oblique; vein 3 near lower angle, 4 from angle, 5 near angle; 6 below upper angle; 7 and 8 from upper angle; 9 and 10 stalked with 8. Hind wings : veins 3 and 4 stalked; 5 well above angle; 6 and 7 on short stalk.

Type of genus, Rhyncholita ? viridicosta, Schs. (A. M.N. H. 1912, p. 202).

UPOTHENIA, gen. nov.

Male.—Antennæ^{*}pubescent, ciliate. Palpi obliquely ascending, slender, smoothly scaled, acuminate. Fore wings : apex acute ; outer margin oblique ; no areole ; veins 7–10 stalked. Hind wing : veins 3 and 4 from lower angle ; 5 well above lower angle ; 6 and 7 from upper angle.

Type Megachyta acutipennis, Schs. (A. M. N. H. 1912, ix. p. 211).

II.—New Species of Diploptera in the Collection of the British Museum. By GEOFFREY MEADE-WALDO, M.A.

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PART IV.

THE following paper deals principally with points in the synonymy of known species, but four species and a variety are described for the first time.

In the Ann. & Mag. Nat. Hist. (8) vi. p. 100 (1910), I stated that no species of *Alastor* had been recorded from tropical Africa; but two species have been recently received from Cape Colony, and are here described, so that its occurrence further north may be confidently expected.

As before, all measurements of length are from the front of the head to the apex of the second abdominal segment.

ISCHNOCŒLIA, Perkins.

In the Ann. & Mag. Nat. Hist. (8) vol. v. p. 38 (1910) this genus was synonymized with *Elimus*, Sauss., but it has